

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Missile Defense Agency										Date: February 2018		
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603907C I Sea Based X-Band Radar (SBX)							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	431.892	115.201	145.695	149.715	-	149.715	175.013	155.718	129.044	136.390	Continuing	Continuing
MX46: Sea Based X-Band Radar Development Support	414.948	112.139	141.737	143.604	-	143.604	168.045	151.462	124.637	131.987	Continuing	Continuing
MD40: Program-Wide Support	16.944	3.062	3.958	6.111	-	6.111	6.968	4.256	4.407	4.403	Continuing	Continuing
Program MDAP/MAIS Code: 362												
Note FY2018 increase provides increase from 120-days to 330-days at sea for multiple operations, additional sustainment and test support.  FY 2017 AMENDED BUDGET REQUEST JUSTIFICATION: \$+4.500M was required to address emergency warfighting readiness requirements to ensure readiness of the BMDS.  FY 2017 MISSILE DEFEAT ENHANCEMENTS REPROGRAMMING (FY17-26 PA): +\$15.000M was required to address emergency warfighting requirements in support of X86 processor.  FY 2018 MISSILE DEFEAT AND DEFENSE ENHANCEMENTS (MDDE) BUDGET AMENDMENT: +\$15.000M is required to address emergency warfighting requirements in support of X86 processor.  A. Mission Description and Budget Item Justification The SBX is an advanced X-band radar that provides the capability for mid-course acquisition, tracking, discrimination and hit-assessment of ballistic missiles. The SBX radar is mounted on a mobile, ocean-going, semi-submersible platform, enabling it to cover any region of the globe. The SBX supports the Ballistic Missile Defense System (BMDS) Homeland Defense mission by tracking and discriminating sophisticated Intercontinental Ballistic Missile (ICBM) threats.  SBX operates at sea for BMDS flight and ground test participation or in an active, operational status when indications and warnings signal the need for enhanced discrimination. The SBX is located in a Pacific port when not required at sea. The SBX maintains vessel certifications for operations at sea as well as software compatibility with the BMDS.  FY 2017 AMENDED BUDGET REQUEST JUSTIFICATION: +\$4.500M was required to address emergency warfighting readiness requirements to ensure readiness of the BMDS. +\$3.500M Project MX46-SBX Radar Dev Support/XBR Operations and Support to extend SBX Operations to support NORTHCOM readiness requirements +\$1.000M Project MX46-SBX Radar Dev Support/XBR Operations and Support to update X-Band Radar and GMD Fire Control (GFC) interfaces to the x86 architecture to resolve incompatibility and increase radar availability.												

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Missile Defense Agency				Date: February 2018		
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 Program Element (Number/Name) PE 0603907C I Sea Based X-Band Radar (SBX)				
FY 2017 MISSILE DEFEAT ENHANCEMENTS REPROGRAMMING (FY17-26 PA): +\$15.000M is required to address emergency warfighting readiness requirements to ensure readiness of the BMDS.						
+\$15.000M Project MX46 - Sea Based X-Band Radar Development Support: required to replace the obsolete Superdome processor with a new X86 processor. Upgrades will improve the performance of the SBX in support of testing and real world events. This is a base budget requirement.						
FY 2018 MISSILE DEFEAT AND DEFENSE ENHANCEMENTS (MDDE) BUDGET AMENDMENT: +\$15.000M is required to address emergency warfighting readiness requirements to ensure readiness of the BMDS.						
+\$15.000M Project MX46 - Sea Based X-Band Radar Development Support: required to replace the obsolete Superdome processor with a new X86 processor. Upgrades will improve the performance of the SBX in support of testing and real world events. This is a base budget requirement.						
B. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget		93.287	130.695	114.545	-	114.545
Current President's Budget		115.201	145.695	149.715	-	149.715
Total Adjustments		21.914	15.000	35.170	-	35.170
• Congressional General Reductions		-3.000	0.000			
• Congressional Directed Reductions		0.000	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		20.000	0.000			
• Congressional Directed Transfers		0.000	0.000			
• Reprogrammings		9.914	0.000			
• SBIR/STTR Transfer		0.000	0.000			
• FY 2017 Request for Additional Appropriations		-20.000	0.000	0.000	-	0.000
• Missile Defeat and Defense Enhancement		15.000	15.000	0.000	-	0.000
• Other Adjustment		0.000	0.000	35.170	-	35.170
Change Summary Explanation						
The FY 2017 adjustment of \$+9.914 million reflects an increase to address emergency warfighting readiness requirements to ensure readiness of the BMDS. The increase from PB18 to PB19 in FY 2019 supports full operations and x86 XBR superdome replacement to address obsolescence requirements and increase the XBR processing capabilities.						
FY 2017 AMENDED BUDGET REQUEST JUSTIFICATION: \$+4.500M was required to address emergency warfighting readiness requirements to ensure readiness of the BMDS.						

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Missile Defense Agency		Date: February 2018
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 Program Element (Number/Name) PE 0603907C I Sea Based X-Band Radar (SBX)	
<p>FY 2017 MISSILE DEFEAT ENHANCEMENTS REPROGRAMMING (FY17-26 PA): +\$15.000M was required to address emergency warfighting requirements in support of X86 processor.</p> <p>FY 2018 MISSILE DEFEAT AND DEFENSE ENHANCEMENTS (MDDE) BUDGET AMENDMENT: +\$15.000M is required to address emergency warfighting requirements in support of X86 processor.</p> <p>PB19 reflects approved out year Missile Defeat and Defense Enhancement (MDDE) tails.</p>		

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Missile Defense Agency										Date: February 2018		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)				Project (Number/Name) MX46 / Sea Based X-Band Radar Development Support			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
MX46: Sea Based X-Band Radar Development Support	414.948	112.139	141.737	143.604	-	143.604	168.045	151.462	124.637	131.987	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note N/A												
A. Mission Description and Budget Item Justification This project provides developmental operations and support of the SBX Radar and its four major sub-systems: the self-propelled vessel; the X-Band Radar (XBR); the In-Flight Interceptor Communications System Data Terminal; and the communications network. Developmental operations and support activities include operation and sustainment of the vessel, developmental operation and sustainment of the XBR, limited XBR software support and vessel and shore side security.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2017	FY 2018	FY 2019	
<b>Title:</b> Vessel Operations and Support  <div>Articles:</div> <b>Description:</b> Vessel Operations and Support provides for sustainment of the SBX vessel for full operations. This effort maintains annual surveys and U.S. Coast Guard Certifications to ensure readiness for operational contingencies, provides for resupply of SBX, and conducts in port and underway maintenance. The SBX participates in BMDS ground tests and flight tests per the Integrated Master Test Plan (IMTP). This effort also provides force protection for SBX and military flight deck upgrade. Specific and/or unique accomplishments to each FY are as follows:  <b>FY 2018 Plans:</b> - SEE ABOVE.  <b>FY 2019 Plans:</b> - SEE ABOVE.  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Decrease from FY 2018 to FY 2019 reflects the completion of the military flight deck.									51.472	79.082	72.762	
									-	-	-	
<b>Title:</b> System Force Protection  <div>Articles:</div> <b>Description:</b> This effort provides force protection for SBX.									4.240	5.869	0.000	
									-	-	-	

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Missile Defense Agency										Date: February 2018		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)					Project (Number/Name) MX46 / Sea Based X-Band Radar Development Support		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2017	FY 2018	FY 2019
FY 2018 Plans: -Continue force protection, increasing days at sea from 120 to 330 for full operations												
FY 2019 Plans: N/A												
FY 2018 to FY 2019 Increase/Decrease Statement: This effort moved to Vessel Management in FY 2019.												
Title: XBR Operations and Support										56.427	56.786	70.842
Articles:										-	-	-
Description: This effort operates and sustains the XBR at full operations, operates and sustains SBX communications systems, performs mission integration functions, and provides support for contingency operations with manning for improved readiness enabling rapid response time from notification to underway. XBR Operations and Support maintains limited software sustainment for system capability with the BMDS and fields additional XBR capability to the Warfighter with the BMDS capability increment. This effort also provides precision track, discrimination, and hit assessment for engagement support in BMDS ground tests and flight tests per the approved IMTP. Additional development efforts include x86 XBR superdome replacement to address obsolescence requirements and increase the XBR processing capabilities. Specific and/or unique accomplishments to each FY are as follows:												
FY 2018 Plans: -Complete implementation of a DoD Regional Clock for the BMDS to improve warfighter readiness by ensuring integrity and availability of positioning data in order to address emerging DoD Execution Order												
FY 2019 Plans: - SEE ABOVE.												
FY 2018 to FY 2019 Increase/Decrease Statement: Increase from FY 2018 to FY 2019 reflects x86 XBR superdome replacement finalization of the x86 architecture and initial vessel integration.												
Accomplishments/Planned Programs Subtotals										112.139	141.737	143.604
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost	
• 0603179C: Advanced C4ISR	3.489	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.489	

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Missile Defense Agency										Date: February 2018		
Appropriation/Budget Activity 0400 / 4				R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)				Project (Number/Name) MX46 / Sea Based X-Band Radar Development Support				
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost	
• 0603882C: Ballistic Missile Defense Midcourse Defense Segment	1,034.861	957.097	926.359	-	926.359	1,046.235	847.537	585.956	572.619	Continuing	Continuing	
• 0603884C: Ballistic Missile Defense Sensors	252.665	278.145	220.876	-	220.876	250.238	267.502	263.758	260.273	Continuing	Continuing	
• 0603891C: Special Programs - MDA	289.364	365.190	422.348	-	422.348	406.779	405.289	425.469	403.884	Continuing	Continuing	
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	465.433	454.862	475.168	-	475.168	515.239	494.873	492.119	515.529	Continuing	Continuing	
• 0603898C: Ballistic Missile Defense Joint Warfighter Support	47.402	48.954	48.767	-	48.767	53.418	51.448	54.076	54.061	Continuing	Continuing	
• 0603904C: Missile Defense Integration and Operations Center (MDIOC)	53.483	53.265	54.925	-	54.925	58.498	57.764	59.020	61.915	Continuing	Continuing	
• 0604879C: Ballistic Missile Defense Sensor Test	81.376	101.839	81.001	-	81.001	77.654	68.026	101.091	81.903	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
SBX is contractor operated and maintained through a variety of contracts between the Navy and MDA. SBX-1 Vessel Management and Security contracts are managed by Military Sealift Command. The SBX radar is operated and maintained on contracts managed by MDA.												
E. Performance Metrics												
N/A												

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2019 Missile Defense Agency</b>												<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 0400 / 4						<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)						<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support			
<b>Product Development (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	N/A
<b>Remarks</b> N/A															
<b>Support (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Vessel Operations and Support - Force Protection	MIPR	Military Sealift Command : Va	0.000	0.000		0.000		6.014	Feb 2019	-		6.014	Continuing	Continuing	Continuing
Vessel Operations and Support - Fuel	MIPR	Military Sealift Command : VA	38.053	5.638	Nov 2016	9.885	Jan 2018	11.494	Jan 2019	-		11.494	Continuing	Continuing	Continuing
Vessel Operations and Support - Navy Transition Office	MIPR	US Navy : AL	5.732	0.000		0.000		0.000		-		0.000	0.000	5.732	0.000
Vessel Operations and Support - Operational Support Vessel (OSV Resupply)	MIPR	Military Sealift Command : VA	0.000	10.629		14.670	Feb 2018	17.288	Feb 2019	-		17.288	Continuing	Continuing	Continuing
Vessel Operations and Support - Program Management Office	MIPR	Military Sealift Command : VA	3.701	1.130	Nov 2016	1.900	Oct 2017	1.724	Oct 2018	-		1.724	Continuing	Continuing	Continuing
Vessel Operations and Support - SBX Operations & Support (Vessel)	MIPR	Military Sealift Command : VA	122.200	21.333	Oct 2016	33.654	Oct 2017	26.310	Oct 2018	-		26.310	Continuing	Continuing	Continuing
Vessel Operations and Support - SBX Vessel Maintenance	MIPR	Tote : HI/NJ	24.371	3.677	Oct 2016	8.915	Mar 2018	0.000		-		0.000	Continuing	Continuing	Continuing
Vessel Operations and Support - Vessel Mission Integration	C/FFP	Gryphon Tech. : AL/ HI	39.225	9.065	Dec 2016	10.058	Dec 2017	9.932	Dec 2018	-		9.932	Continuing	Continuing	Continuing

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Missile Defense Agency													<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 0400 / 4						<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)				<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support					

  

<b>Support (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
System Force Protection - Force Protection	SS/CPFF	AQuate : HI	22.267	4.240	Oct 2016	5.869	Oct 2017	0.000		-		0.000	Continuing	Continuing	Continuing
XBR Operations and Support - SBX Communications Support	SS/CPIF	Boeing : AL/HI	7.768	2.372	Dec 2016	2.701	Nov 2017	2.743	Jan 2019	-		2.743	Continuing	Continuing	Continuing
XBR Operations and Support - XBR Operations & Support	SS/CPIF	Raytheon : AL/AK/HI	151.631	54.055	Nov 2016	54.085	Nov 2017	68.099	Dec 2018	-		68.099	Continuing	Continuing	Continuing
<b>Subtotal</b>			414.948	112.139		141.737		143.604		-		143.604	Continuing	Continuing	N/A

  

<b>Remarks</b> N/A															
-----------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

  

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	N/A

  

<b>Remarks</b> N/A															
-----------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

  

<b>Management Services (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	N/A

  

<b>Remarks</b> N/A															
-----------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Missile Defense Agency										<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 0400 / 4					<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)				<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support				
	<b>Prior Years</b>	<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	414.948	112.139		141.737		143.604		-		143.604	Continuing	Continuing	N/A
<b>Remarks</b> N/A													

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Missile Defense Agency										Date: February 2018																			
Appropriation/Budget Activity 0400 / 4										R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)										Project (Number/Name) MX46 / Sea Based X-Band Radar Development Support									
Significant Event Complete ▲		Significant Event Planned △		Milestone Decision Complete ★		Milestone Decision Planned ☆		Element Test Complete ◆		Element Test Planned ◇		System Level Test Complete ●				System Level Test Planned ○				Complete Activity ◆				Planned Activity ◇					
										FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		FY 2023							
IMTP v19.1 flight and ground test event details are at a higher classification.										◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇				

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Missile Defense Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)	Project (Number/Name) MX46 / Sea Based X-Band Radar Development Support

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
IMTP v19.1 flight and ground test event details are at a higher classification.	1	2017	4	2023

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2019 Missile Defense Agency										Date: February 2018		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)				Project (Number/Name) MD40 / Program-Wide Support			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
MD40: Program-Wide Support	16.944	3.062	3.958	6.111	-	6.111	6.968	4.256	4.407	4.403	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note Program Wide Support reflects proportional changes as a result of budget changes to the Sea-Based X-Band Radar (SBX)program element. Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests on the R-3.												
A. Mission Description and Budget Item Justification PWS contains non-headquarters management costs in support of MDA functions and activities across the entire BMDS. It Includes Government Civilians and Contract Support Services. This provides integrity and oversight of the BMDS as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes Global Deployment personnel and support performing deployment site preparation and activation, and provides facility capabilities for MDA Executing Agent locations. Other MDA wide costs includes: physical and technical security; civilian drug testing; audit readiness; the Science, Technology, Engineering, and Mathematics (STEM) program; legal services and settlements; travel and agency training; office, equipment, vehicle, and warehouse leases; utilities and base operations; data and unified communications support; supplies and maintenance; materiel and readiness and central property management of equipment; and similar operating expenses. PWS is allocated on a pro-rata basis and therefore, fluctuates by year based on the adjusted RDT&E profile (which excludes: 0305103C Cyber Security Initiative, 0603274C Special Programs, 0603913C Israeli Cooperative Program and 0901598C Management Headquarters).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2017	FY 2018	FY 2019	
Title: Program Wide Support  Articles:  Description: N/A  FY 2018 Plans: N/A  FY 2019 Plans: N/A  FY 2018 to FY 2019 Increase/Decrease Statement: N/A									3.062	3.958	6.111	
									-	-	-	
Accomplishments/Planned Programs Subtotals									3.062	3.958	6.111	

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Missile Defense Agency		<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / <i>Sea Based X-Band Radar (SBX)</i>	<b>Project (Number/Name)</b> MD40 / <i>Program-Wide Support</i>
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>Remarks</b>		
<b>D. Acquisition Strategy</b> N/A		
<b>E. Performance Metrics</b> N/A		

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Missile Defense Agency												Date: February 2018			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)				Project (Number/Name) MD40 / Program-Wide Support					
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Wide Support - Agency Facilities, Operations and Maintenance	MIPR	Various : Multi: AK, AL, CA, CO, VA	1.613	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations Management	Allot	Various : Multi: AL, CA, CO, VA	1.779	0.062	Jul 2017	0.079	Jul 2018	0.093	Jul 2019	-		0.093	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Other Agency Services (MIPRs)	MIPR	Various : Multi: AL, CA, CO, VA	5.808	3.000	Mar 2017	3.879	Mar 2018	6.018	Mar 2019	-		6.018	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services (CPAF)	C/CPAF	Northrop Grumman : CO	7.541	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services (FFP)	C/FFP	Various : Multi: VA,WA	0.203	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services (Reqn)	Reqn	Dept of Labor : VA	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Subtotal			16.944	3.062		3.958		6.111		-		6.111	Continuing	Continuing	N/A
Remarks N/A															
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			16.944	3.062		3.958		6.111		-		6.111	Continuing	Continuing	N/A
Remarks N/A															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Missile Defense Agency														Date: February 2018															
Appropriation/Budget Activity 0400 / 4										R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)										Project (Number/Name) MD40 / Program-Wide Support									
Significant Event Complete ▲				Milestone Decision Complete ★				Element Test Complete ◆				System Level Test Complete ●				Complete Activity ◆													
Significant Event Planned △				Milestone Decision Planned ☆				Element Test Planned ◇				System Level Test Planned ○				Planned Activity ◇													
										FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		FY 2023							
MD40 Program-Wide Support										◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇					

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Missile Defense Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603907C / Sea Based X-Band Radar (SBX)	Project (Number/Name) MD40 / Program-Wide Support

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2017	4	2023